

36040  
S/040/62/026/002/012/025  
D299/D301

10.1200

AUTHOR: Makeyev, N.N. (Perm')

TITLE: On the collision of gas jets

PERIODICAL: Prikladnaya matematika i mekhanika, v. 26, no. 2,  
1962, 308 - 315

TEXT: The exact solution is given to the plane problem of collision between gas jets which flow from co-axial channels of finite width; the channel walls are parallel. The velocity  $v_0$  at the free surface is subsonic. The solution of the problem reduces to the solution of Dirichlet's problem for Chaplygin's equation

$$4\tau^2(1-\tau)\frac{\partial^2\psi}{\partial\tau^2} + 4\tau[1+(\beta-1)\tau]\frac{\partial\psi}{\partial\tau} + [1-(2\beta+1)\tau]\frac{\partial^2\psi}{\partial\theta^2} = 0 \quad (1.3)$$

in a semicircle; here  $\beta = 1/(\kappa - 1)$ ,  $\kappa = c_p/c_v$ . The solution is sought in the form of Fourier series. The obtained formulas contain as particular cases, well known results of other investigators (Chaplygin, Slezkin, Troshin). A new system of coordinates  $(\xi, \eta)$ ,  $\sqrt{\quad}$   
Card 1/4

Observation on the work of ...

28510  
S/040/61/025/002/022/022  
D201/D302

$$\frac{h}{H} = \frac{\kappa - 1}{2\kappa} \left( \frac{p_0}{p} - 1 \right) \left[ \left( \frac{p_0}{p} \right)^{\frac{\kappa - 1}{\kappa}} - 1 \right]^{-1} \quad (2.6)$$

This elementary expression also applies in the case  $q = 2$ . There are 4 references: 3 Soviet-bloc and 1 non-Soviet-bloc. The reference to the English-language publication reads as follows: M.J. Lighthill, The hodograph transformation in transonic flow, II, Proc. Roy. Soc., 1947, A, 111, 341 - 351.

SUBMITTED: March 12, 1960

Card 5/5

28510

S/040/61/025/002/022/022  
D201/D302

Observations on the work of ...

regular for  $\tau = 0$ . The formula for a Bord nozzle is

$$\frac{h}{H} = \frac{T_1(\tau_0)}{2\tau_0 T_1'(\tau_0) + T_1(\tau_0)} \quad (2.1)$$

where  $H$  is the diameter of the nozzle, and  $h$  is the diameter of the jet. The work of I.A. Kibel' (Ref. 3: N.Ye. Kochin, I.A. Kibel and N.V. Poze, *Toereticheskaya gidromekhanika* (Theoretical Hydrodynamics) Gostekhizdat, 1948, t. II, str. 122) gives the formula for the jet in the general case as

$$\frac{h}{H} \left( 1 - \frac{8}{\pi q^2} \sin \frac{\pi q}{2} \sum_{m=1}^{\infty} (-1)^m \left[ 1 + \frac{\tau_0}{m} \frac{y'_{2m}(\tau_0)}{y_{2m}(\tau_0)} \right] \frac{m}{4m^2/q^2 - 1} \right)^{-1} \quad (2.3)$$

With  $q = 2$ , (2.3) reduces to (2.1). Hence  $T_1$  is elementary, and by means of Lighthill's transformation and, e.g. the formulae of San-Venan and Ventsel', one obtains S.A. Khristianovich's formula for the jet.

Card 4/5

28510

Observations on the work of ...

S/040/61/025/002/022/022  
D201/D302 $y_n(\tau) = y_{1/2n}(\tau)$  is a hyper-geometric function. Assuming

$$\lambda = \frac{\pi}{2Q}, \quad \theta_m = -n\theta, \quad A = -\frac{\pi}{2}, \quad B = -\frac{1}{2} \quad (1.4)$$

and finding  $B_m$  by means of

$$0 = 2 \sum_{n=1}^{\infty} \frac{(-1)^{n+1}}{n} \sin n\theta \quad (-\pi < \theta < \pi)$$

a solution for  $\psi$  can be found,

$$\psi = -\frac{Q}{\pi}(\theta + \pi) + \frac{2Q}{\pi} \sum_{n=1}^{\infty} \frac{(-1)^{n+1} T_n(\tau)}{n T_n(\tau_0)} \sin n\theta \quad (1.5)$$

where  $T_n(\tau) = T_{2m}(\tau) = \tau^m y_m(\tau)$  is a solution of

$$\tau^2(1 - \tau) \frac{d^2 T}{d\tau^2} + \tau[1 + (\beta - 1)\tau] \frac{dT}{d\tau} - m^2[1 - (2\beta + 1)\tau]T = 0 \quad (1.6)$$

Card 3/5

Observations on the work of ...

28510 S/040/61/025/002/022/022  
D201/D302

potential and stream function,  $\kappa$  is the specific heat of the gas,  $k$  is the coefficient in the adiabatic equation,  $\theta$  is the angle between  $V$  and the  $x$ -axis. Chaplygin's equations have the form

$$\frac{\partial \psi}{\partial y} = (1-\tau)^\beta \frac{\partial \varphi}{\partial x}, \quad \frac{\partial \psi}{\partial x} = -(1-\tau)^\beta \frac{\partial \varphi}{\partial y} \quad (1.1)$$

or in the plane of the hodograph

$$\frac{\partial \varphi}{\partial \theta} = \frac{2\tau}{(1-\tau)^\beta} \frac{\partial \psi}{\partial \tau}, \quad \frac{\partial \varphi}{\partial \tau} = -\frac{1-(2\beta+1)\tau}{2\tau(1-\tau)^{\beta+1}} \frac{\partial \psi}{\partial \theta} \quad (1.2)$$

The stream function is then of the form

$$\lambda \psi = A + B\theta + \sum_{m=1}^{\infty} B_m \left( \frac{\tau}{\tau_0} \right)^m \frac{y_m(\tau)}{y_m(\tau_0)} \sin(2m\theta + \theta_m) \quad (1.3)$$

where  $\lambda$ ,  $A$  and  $B$  are constants,  $B_m$  is a numerical coefficient, and

10.1200

28510  
S/040/61/025/002/022/022  
D201/D302

AUTHOR: Makeyev, N.N. (Saratov)

TITLE: Observations on the work of Ya.I. Sekerzh-Zen'kovich  
"On the theory of the Bord nozzle for a gas"

PERIODICAL: Prikladnaya matematika i mekhanika, v. 25, no. 2,  
1961, 383 - 384

TEXT: The article is a refutation of the conclusion drawn in the article of Ya.I. Sekerzh-Zen'kovich (Ref. 2: K. teorii nasadka Borda dlya gaza, PMM, 1957, t. XXI, vyp. 6, str. 850-855), in which the latter states that the result in S.A. Chaplygin (Ref. 1: 0 gazovykh struyakh. Polnoye sobr. soch. S.A. Chaplygin, Izd-vo AN SSSR, 1933, t. 11, str. 3-90) do not hold in the case  $q = 2$ . Chaplygin's article deals with the efflux of a gas at subsonic speed from an infinite vessel with angle  $q$  between the walls. The following notation is used:  $v$  is the velocity vector with components  $u$  and  $v$  along the axes,  $\varphi(x, y)$ ,  $\psi(x, y)$  are the velocity

Card 1/5

MAKEYEV, N.N.

A generalization of the Eddington-Poincaré equation. Astron.zhmr.  
37 no.6:1125-1127 N-D '60. (MIRA 13:12)

1. Saratovskiy gosudarstvennyy universitet im. N.G.Chernyshevskogo.  
(Mechanics, Celestial)

L 42937-66

ACC NR: AN6008036

The study of changes in intensity of cosmic radiation depending on its great distance from the sun is also considered of great importance. In order to study physical conditions in outer space, the Venus 2 and Venus 3 were equipped with the following instruments: a three-component ferrosounding magnetometer to measure interplanetary magnetic fields; gas-discharge meters and a semiconductor detector to study cosmic rays; special sensors (traps) to measure the flow of low-energy charged particles and to determine the magnitude of solar plasma and their energy spectra; piezoelectric sensors to study micrometeors; a radio receiver to measure cosmic radiation in wave ranges of 150 m, 1500 m, and 15 km. The above set of instruments provides for study of the basic characteristics of physical conditions in interplanetary space.

[GC]

SUB CODE: 03, 04,

22/ SUBM DATE: none

Card 2/2 MLP



L 42957-66 FSB-2/EWT(1)/FCC TT/GN/WS-2  
 ACC NR: AN6008036 (A,N) SOURCE CODE: UR/9008/66/000/055/0006/0006

AUTHOR: Makeyev, N. I. (Editor in Chief)

ORG: none

TITLE: The flight of automatic interplanetary stations Venus 2 and Venus 3

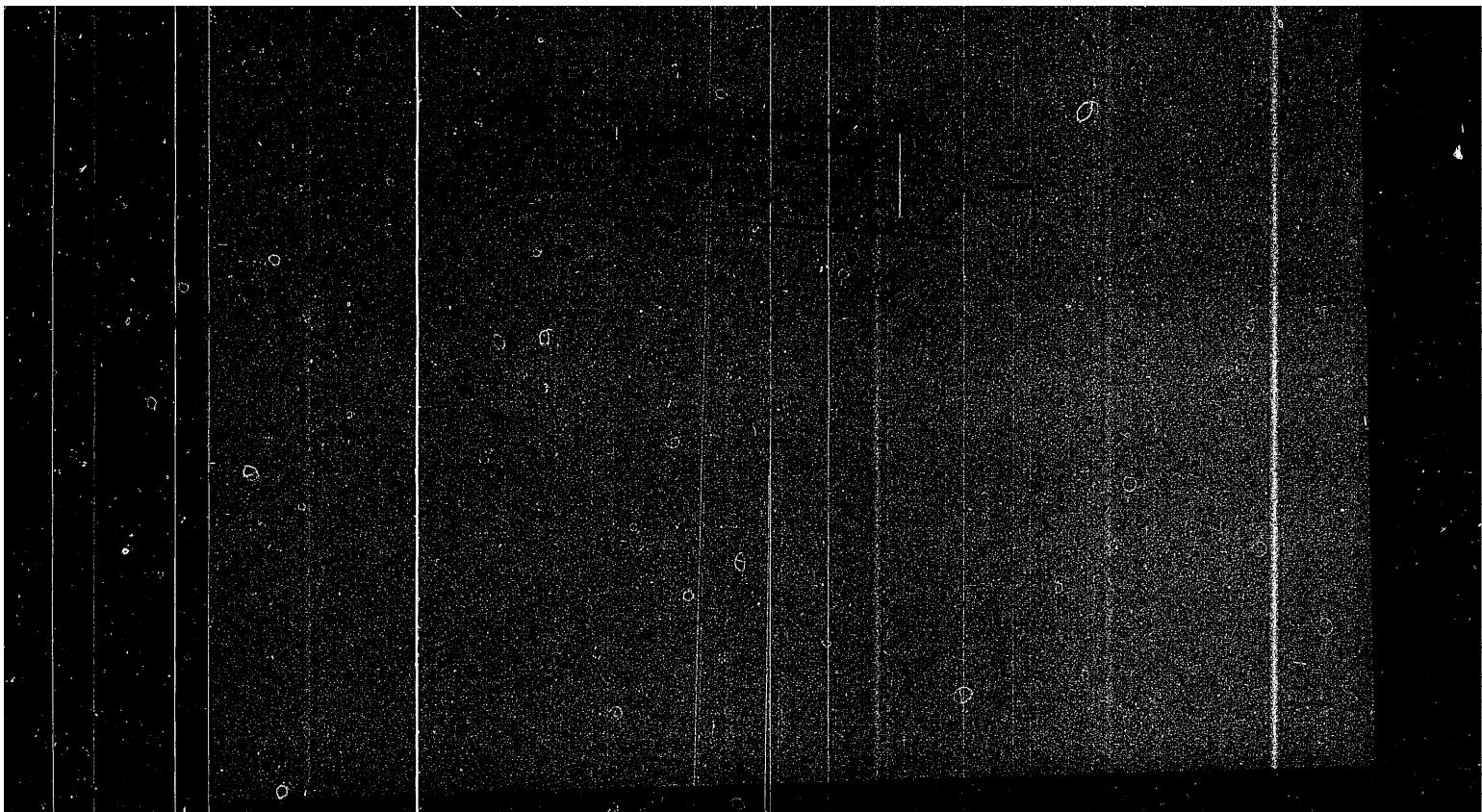
SOURCE: Krasnaya zvezda, <sup>770.55,</sup> 6 Mar 66, p. 6, col. 1-7

TOPIC TAGS: solar wind, cosmic ray, solar magnetic field, satellite sensor system,  
 interplanetary probe, solar activity, atmosphere, earth magnetic  
 field, interplanetary space, magnetometer, gas discharge counter, semi-  
 conductor detector, radiation belt, solar plasma /Venus 2  
 interplanetary probe, Venus 3 interplanetary probe

ABSTRACT: The author discusses the study of solar cosmic rays, the solar mag-  
 netic field, the solar wind, and the earth's radiation belts during the present period  
 of minimum solar activity, and stresses the importance of this research in deter-  
 mining the boundaries of the earth's atmosphere. The flight of the Venus station  
 beyond the earth's magnetosphere made it possible to study the low-energy compo-  
 nent of cosmic rays, which does not reach the earth because of the magnetic field.

Card 1/2

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001031500018-6



APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001031500018-6

MAKEYEV, N. I.

USSR/Engineering - Arc welding

Card : 1/1 Pub. 128 - 18/32

Authors : Stepanov-Grebenshikov, N. M. and Makeev, N. I.

Title : Electrical arc-welding with copper-electrodes having a special coating

Periodical : Vest. mash. 34/7, 61-64, July 1954

Abstract : The author gives some information on electrical arc-welding of various alloys, with specially coated, mark ML and MS, electrodes. The composition of the electrodes, and methods of welding are described. Illustrations depicting the microstructure of steel, and other alloys, are presented. Tables; diagram.

Institution : ...

Submitted : ...

*Evaluation B-87421*

MAKEYEV, N. I.

PA 233T45

USSR/Metallurgy - Welding, Copper

Aug 52

"Electric Arc Welding of Copper Using a Copper Electrode With Quality Coating," P. T. Dmitriyev, N. M. Stepanov-Grebennikov, N. I. Makeyev, Engineers

"Avtogen Delo" No 8, pp 1-4

Reviews existing methods of copper joining, finding them unsatisfactory, and suggests new method developed by group of workers of a machine-building plant after experimenting for 1 1/2 yrs. Method is based on using copper electrode with special coating named Komsomolets-100," consisting of following components; ferromanganese, silicon copper, fluorspar, feldspar, and water glass. Discusses results of testing new electrodes.

PA 233T45

MAKEYEV, N. I.

"The Problem of Increasing the Fertility of Leached-Out Chernozems and Alkaline-Saline Soils of Krasnodarskaya Oblast." Cand Agr Sci, Omsk Agricultural Inst imeni S. M. Kirov, Omsk, 1954. (KL, No 1, Jan 55)

Survey of Scientific and Technical Dissertations Defended at USSR<sup>a</sup> Higher Educational Institutions (13)  
SO: Sum. No. 598, 29 Jul 55

MAKEYEV, M. Ye.

"Experience in Operating the Dubossary Hydroelectric Power Plant."

in book - New Developments in the Design of Electric Equipment for Hydro-  
electric Power Plants, 1957. 222 p. Moscow-Leningrad, Gosenergoizdat.

(Data on the Conference on Design and Operation, Moscow, 16-24 May  
1956.)

BOGATSKIY, V.V.; MAKEYEV, M.M.

Geological and geophysical characteristics of magnetite deposits  
of the northern part of the Western Sayan Mountains. Razved.i  
okh.nedr 28 no.1:5-11 Ja '62. (MIRA 15:3)

1. Krasnoyarskoye geologicheskoye upravleniye.  
(Sayan Mountains---Magnetite)

YAKUBCHIK, A.I.; NIKITINA, V.D.; Primali uchastiye: KONOVALOVA, V.I.;  
MAKEYEV, M.K.

Chemical structure of bivinyll polymers obtained in the presence  
of butyllithium. Zhur.prikl.khim. 35 no.12:2749-2753 D '62.  
(MIRA 16:5)  
(Butadiene) (Lithium) (Polymerization)



1. MAKEYEV, M.I., ENG.; TIKHONOV, L.P., ENG.
2. USSR (600)
4. Windlass
7. New, powerful winches for tractors. Mekh.stroi. 9 no.9, 1952.

9. Monthly List of Russian Accessions, Library of Congress, January 1953, Unclassified.

MAKEYEV, M.G., kand. tekhn. nauk; YEREMEYEV, P.V., kand. tekhn. nauk

Hard facing the flanges of electric locomotive wheel bandages  
in carbon dioxide. Svar. proizvod. no. 6:6-8 Je '65.

(MIRA 18:8)

1. Moskovskiy ordena Lenina i ordena Trudovogo Krasnogo Znameni  
institut inzhenerov zheleznodorozhnogo transporta.

LAMPERT, F.F.; MAKEYEVA, M.G.

Hygienic problems of housing in the Far North. Probl. Sev.  
no.6:77-82 '62. (MIRA 16:8)

1. Institut obshchey i kommunal'noy gigiyeny imeni A.N.Sysina  
AMN SSSR.

(Russia, Northern--Housing--Hygienic aspects)

MAKEYEV, M.G., kand.tekhn.nauk; AKSENOVA, L.A., inzh.

Effect of repeated building up on the structure and mechanical properties of metals in the area of locally roller-treated surfaces and flanges. Trudy MIIT no.160:87-106 '62.

(MIRA 16:2)

(Metals--Fatigue)

(Electric welding--Testing)

L 35195-6 EWP(k)/EWP(q)/EWT(m)/EDS AFPC/ABD Pf-4 JD/HM  
 ACCESSION NR: AR3003750 8/0137/63/000/005/E017/E017

SOURCE: Izh. Metallurgiya, Abs. 58108

APPROX: Makeyev, M. G., Aksenova, L. A.

TITLE: The Problem of welding with a vibrating electrode

CITED SOURCE: Tr. Mosk. in-ta inzh. zh.-d. transp., vy\*p. 160, 1962, 76-86

TOPIC TAGS: welding, vibrating electrode, static tension, viscosity, bending

TRANSLATION: Welding by a vibrating electrode with the aid of an electrode holder of improved construction was investigated. The basic parameters of the welding process and welding quality were determined. It was established that the vibration of the electrode during the welding process leads to a considerable increase in the output and basic strength indices:  $\sigma_b$  in static tension is increased by 5.1%,  $\sigma_k$  is increased by 12.2%, and the number of cycles before breakdown in the case of alternating bending increased by 90%.

V. Klyuchnikova.

DATE ACQ: 21 Jun 63  
 Card 1/1

SUB CODE: ML

ENCL: 00

YEREMEYEV, P.V., kand.tekhn.nauk; MAKEYEV, M.G., kand.tekhn.nauk

Design and performance of the universal automatic head for the weaving arc welding in the building up of parts for the rolling stock. Trudy MIIT no.160:57-75 '62. (MIRA 16:2)  
(Electric welding--Equipment and supplies)

## Physical Metallurgy (Cont.)

SOV/3232

COVERAGE: The book presents the theoretical principles of physical metallurgy and gives methods for producing metals and alloys. In addition, information is given on methods of heat treatment, foundry practice, metal forming, and welding. A number of Soviet references appear at the end of each chapter.

## TABLE OF CONTENTS:

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## PART I. PHYSICAL METALLURGY AND HEAT TREATMENT

Ch. I. Theory of Alloys	7
1. Atomic and crystalline structure of metals	7
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Card 2/16

MAKEYEV, M. G.

18(7); 25(1)

PHASE I BOOK EXPLOITATION

SOV 1959

Kislik, Vladislav Afanas'yevich, Doctor of Technical Sciences, Professor; Aleksandr Filippovich Troitskiy, Doctor of Technical Sciences, Professor; Dmitriy Grigor'yevich Ivannikov, Doctor of Technical Sciences, Professor; and Mikhail Grigor'yevich Makeyev, Candidate of Technical Sciences, Docent.

Metallovedeniye i goryachaya obrabotka metallov (Physical Metallurgy and Hot Working of Metals), Moscow, Transzheldorizdat, 1959.  
392 p. 10,000 copies printed.

Ed. (Title page): V. A. Kislik, Doctor of Technical Sciences, Professor; Eds. (Inside book): V. V. Danilevskiy, Candidate of Technical Sciences, and Yu. S. Sarantsev, Engineer; Tech. Ed.: P. A. Khitrov.

PURPOSE: This is a textbook for use in higher institutes of locomotive and railroad-car manufacture. It may also be used as a reference book by technical personnel at plants, depots, and track-maintenance shops connected with railroads.

Card ~~1/16~~



BRODOVIN, Nikolay Vladimirovich; MAKHEYEV, Mikhail Grigor'yevich;  
SARANTSEV, Yu.S., red.; KHITROV, P.A., tekhn. red.

[Welder's manual for railroad car repairing] Spravochnik vagonnika  
po svarko. Moskva, Gos. transp. zhel.-dor. izd-vo, 1958. 566 p.  
(Railroads--Cars--Maintenance and repair) (MIRA 11:9)  
(Welding--Handbooks, manuals, etc.)

*MAKEYEV, MIKHAIL GRIGOR'YEVICH*

YEREMYEV, Petr Vladimirovich; *MAKEYEV, Mikhail Grigor'yevich*; BERESTOVY, Ye.I., inzh.red.; KHITROV, P.A., tekhn.red.

[Hard facing and strengthening bands in locomotives; practices of leading depots] Naplavka i uprochnenie bandazhei lokomotivov; opyt peredovykh depo. Moskva, Gos. transp. zhel-dor. izd-vo, 1958. 46 p. (MIRA 11:4)

(Hard facing) (Car wheels)

SOV/137-58-7-15073

## The Effect of an Electrode Vibration (cont.)

electrodes with diameters of 4 and 5 mm are employed: the coefficient of fusion  $\alpha_f$ ; the coefficient of beading  $\sigma_{be}$ ; the coefficient of losses,  $\psi$ , and the rate of fusion of the electrode,  $v_{fs}$ . It was established that a satisfactory weld is formed at amplitudes of 0.6, 1.2, and 1.8 mm; at amplitudes of 2.4 and 3.0 mm the external appearance of the welded seam is impaired. In most instances, as the amplitude is increased the values of  $\alpha_f$ ,  $\alpha_p$ , and  $v_{fs}$  increase also, whereas  $\psi$  diminishes. Maximum  $\alpha_f$  and  $\alpha_p$  values were observed at amplitudes of 0.6 and 0.9 mm. In the course of such a process, as compared with regular welding procedures, the values of  $\alpha_f$  and  $\alpha_p$  increase by 8.2-29.4% and 2.2-40.8%, respectively, while the  $\psi$  diminishes by 6.3-52.7%.

V.P.

1. Arc welding--Electrodes
2. Electrodes--Vibration
3. Arc welding--Performance
4. Vibration--Control systems

Card 2/2

SOV/137-58-7-15073

Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 7, p 165 (USSR)

AUTHOR: Makeyev, M.G.

TITLE: The Effect of Electrode Vibration on the Productivity of N.G. Slavyanov's Electric Arc-welding Process (Vliyaniye vibratsii elektroda na proizvoditel'nost' elektrodugovoy svarki po metodu N.G. Slavyanova)

PERIODICAL: Tr. Mosk. in-ta inzh. zh.-d. transp., 1957, Nr 93, pp 191-203

ABSTRACT: The author comments on the possibility of increasing the productivity of the welding process by increasing the rate at which drops of metal break away from the electrode. A vibrating electrode holder was constructed equipped with an electromagnet which was connected to the 65-v terminals of the welding transformer. The core of the electromagnet is a plate on one end of which the electrode is mounted. The amplitude of the vibrations is controlled by means of a stop screw. Investigations were carried out in order to determine how the amplitude of the vibrations affects the following factors when electrodes of the type OMM-5, TsM-7, MEZ-04, as well as chalk

Card 1/2

MAKEYEV, M.G., kandidat tekhnicheskikh nauk.

Effect of the vibration of liquid metal of the welding bath on the  
quality of built-up metal. Trudy MIIT no.82/83:150-174 '55.  
(Welding) (MLRA 9:8)

MAKEYIN, M.G., kandidat tekhnicheskikh nauk.

Thermodynamic calculation of the temperature of a gasolineoxygen flame.  
Trudy MIIT no.82/83:62-75 '55. (MLRA 9:8)

(Gas welding and cutting)  
(Flame)

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001031500018-6

MAKEYEV, M.G., kandidat tekhnicheskikh nauk; BRODOVICH, N.V., kandidat  
~~tekhnicheskikh nauk~~  
Hard facing automatic train couplers. Svar. proizv. no. 3:24-26  
Mr '55. (MLRA 8:9)  
(Hard facing)

APPROVED FOR RELEASE: 06/23/11: CIA-RDP86-00513R001031500018-6

MAKEYEV, M.G., dotsent, kandidat tekhnicheskikh nauk.

Methods of increasing productivity of welding work in repairing  
rolling stock. Trudy MEMIIT no.62:261-276 '53. (MLRA 7:12)  
(Railroads--Cars--Maintenance and repair) (Welding)



PAL'CHUK, N.Yu., Eng.; MAKAROV, N.I., Eng.; MAKEYEV, M.G., Eng.; BRODOVICH, N.V., Eng.;  
LIBER, M.I., ENG.

Electric Welding

Welding with electrode cluster. Avtog. delo, 23, No. 6, 1952.

9. Monthly List of Russian Accessions, Library of Congress, October 1952, Uncl.

MAKEYEV, M. G.

USSR/Engineering - Welding, Processes

May 52

"Concerning Dependence of the Melting Coefficient  
on Welding Current," M. G. Makeyev, Cand Tech Sci

"Avtogen Delo" No 5, pp 4, 5

Discusses results of expts for finding melting  
rate-welding current relationship which, according  
to the author, has not yet been clearly established.  
Concludes that melting coeff for electrode of given  
diam decreases with increase in welding current.

217T37

MAKEYEV, M. G.

PA 160T23

USSR/Engineering - Cutting, Underwater May 50  
Cutting, Oxygen

"Oxygasoline Underwater Cutting of Steel," M. G.  
Makeyev, 2½ pp

"Avtogen Delo" No 5

Describes method of using gasoline as fuel for underwater oxygen cutting. States advantages of method compared with oxyhydrogen cutting: cutting speed is 1.45 times higher, weight of materials decreased 2.8 times, and 13% increase in efficiency factor. Method permits work at any depth accessible to a diver.

160T23

MAKEYEV, M.F.; MORALEVICH, O.D., red.izd-va; YERMAKOVA, T.T., tekhn.red.

[Schedule of passenger steamboat lines of the central basins  
for the 1959 season] Raspisanie dvizheniia passazhirskikh  
sudov parokhodstv tsentral'nykh basseinov na navigatsiiu 1959  
goda. Moskva, Izd-vo "Rechnoi transport," 1959. 63 p.  
(MIRA 12:7)

(Steamboat lines--Time-tables)

MAKEYEV, M., inzh.

Increase the profitability of passenger transportation. Rech.  
transp. 22 no. 6:5-6 Je '63. (MIRA 16:9)  
(Merchant marine—Passenger traffic)

MAKNEYEV, M.F., inzh.; DEVIATAYEV, M.P., Geroy Sovetskogo Soyuza

Rapid transportation of passengers on inland waterways and outlook  
for its growth. Rech. transp. 17 no. 7:11-13 J1 '58. (MIRA 11:8)

1. Kapitan teplokhoda "Raketa" (for Devyatayev).  
(Inland water transportation)  
(Motorships)

Y  
MAKKEEV, M. F.

Prigorodnoe i vnutrigorodskoe rechnoe soobshchenie. [Suburban and interurban  
waterways]. (Vodnyi transport, 1934, no. 4, p. 7-8, illus.).

DLC: HE561.R8

SO: Soviet Transportation and Communications, A Bibliography, Library of Congress  
Reference Department, Washington, 1952, Unclassified

L 04254-67

ACC NR: AP6005378

made in different planes in the shaft of the distributor. A bushing with two diametral channels (which coincide with the annular port and the diametral channel of the distributor) is mounted on the shaft of the distributor. The outer surface of this bushing has four bare spots perpendicular to the axis of each diametral channel. The channels of the cover for delivery and removal of the working fluid are diametrically coupled and coincide with the diametral channels of the bushing. In each channel of the cover is a fixed cup with a convex spherical end, clamped by a spring centered in this cup to a disk with a concave spherical end, which is clamped by the opposite flat end to the bare spot on the bushing.

SUB CODE: 13/ SUBM DATE: 01Jul63.

fv

Card 2/2



L 04254-67 EWR(m)/T DJ

ACC NR: AP6005378 (A)

SOURCE CODE: UR/0413/66/000/001/0122/0122

AUTHORS: Volkov, V. N.; Gurevich, A. Ya.; Makeyev, M. A.; Studenikin, S. P.; Shchekotov, V. P.

ORG: none

TITLE: A radial-piston hydraulic engine. Class 47, No. 177726 [announced by All-Union Scientific Research Institute of Building and Road Construction Machinery (Vsesoyuznyy nauchno-issledovatel'skiy institut stroitel'nogo i dorozhnogo mashinostroyeniya)]

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 1, 1966, 122

TOPIC TAGS: bushing, shaft, hydraulic device, piston engine

ABSTRACT: This Author Certificate presents a radial-piston hydraulic engine containing a stator with a profiled inner surface, a rotor (in the radial hollows of which pistons are placed), a radially positioned journal distributor of the working fluid with two systems of longitudinal channels for delivery and removal of the working fluid, and a cover attached to the stator with channels for delivery and removal of the working fluid. To increase the operating reliability of the hydraulic engine by complete removal of lateral retarding forces from the distributor, the systems of longitudinal channels of the distributor are arranged symmetrically about its axis and are coupled, correspondingly, with an annular port and a diametral channel

Card 1/2

UDC: 621.225

RAYEV-BOGOSLOVSKIY, Boris Sergeyevich, kand. tekhn. nauk; GLUSHKOV, Georgiy Ivanovich, doktor tekhn. nauk; TKACHENKO, Andrey Stepanovich, kand. tekhn. nauk; MANVELOV, Leon Ivanovich, kand. tekhn. nauk; MIKHAYLOV, Aleksenar Vasil'yevich, kand. tekhn. nauk; VOLOKHOV, Nikolay Ivanovich, kand. tekhn. nauk; TOLMACHEV, Ivan Nikolayevich, kand. tekhn. nauk; RUBAN, Fedor Iosifovich, kand. tekhn. nauk; MAKEYEV, K.S., nauchnyy red.; DEBERDEYEV, B.S., red.; GALAKTIONOVA, Ye.N., tekhn. red.

[Durable pavement for airports] Zhestkie pokrytiia aerodromov. [By] B.S.Raev-Bogoslovskii i dr. Moskva, Nauchno-tekhn.izd-vo M-va avtomobil'nogo transporta i shosseinykh dorog RSFSR, 1961. 321 p. (MIRA 15:3)  
(Airports--Runways) (Concrete construction)

127-58-5-24/30

Manipulators for Drilling Shot-Holes in Drifting Horizontal Mining Workings

There is one photo and one figure.

ASSOCIATION: Karnasurtskiy rudnik (Karnasurtskiy Mine) Yenskaya geologo-razvedochnaya ekspeditsiya (Yena Geologic-Prospecting Expedition)

AVAILABLE: Library of Congress

Card 2/2 1. Drilling machines-Installation 2. Drilling machines-Improvement

MAKEYEV, I. V.

127-58-5-24/30

AUTHORS: Makeyev, I.V., Director of the Karnasurt Mine, and Tuayev, A.A., Mining Engineer

TITLE: Manipulators for Drilling Shot-Holes in Drifting Horizontal Mining Workings (Manipulyatory dlya bureniya shpurov pri prokhodke gorizonta'nykh vyrabotok)

PERIODICAL: Gornyy Zhurnal, 1958, Nr 5, p 75 (USSR)

ABSTRACT: According to a proposal of Mining Engineer A.A. Tuayev, manipulators for installing pneumatic drilling machines were mounted on the PML-5 rock-loading machine. They were constructed and applied in the Karnasurt Mine. The manipulator weighs about 220 kg and consists of 4 dismountable units. These devices have operated in the Lovozerskiy gorno-obogatitel'nyy kombinat (Lovozero Mining Concentration Combine) for over 3 years with good results: one drilling machine, with the manipulator, drills 24 shot-holes, each 1.8 m deep, in 5.5 to 6 hours, thereby exceeding the capacity of conventional drilling by 50%. The labor of drilling workers was considerably facilitated. Two manipulators can be mounted on one rock-loading machine.

Card 1/2

167654-53

EMP(r)/EMT(s)/BDS AFFTC

8/12/63/000/004/063/064

53

AUTHOR: Morozov, B. A.; Makayev, I. M.

TITLE: Determination of initial stresses in large machine parts under operational conditions

PERIODICAL: Referativnyy zhurnal, Mekhanika, no. 4, 1963, 74, abstract 47615  
(Tr. Vses. n.-i. proyektino-konstrukts. in-ta metallurg. mashinostr., 1960, ab. 1, 254-257.)

TEXT: The author describes a procedure for the experimental determination of residual stresses in large elements of machine units. He presents a scheme for a device for drilling a circular groove and gives a method for labeling the sockets of resistometers and their temperature compensation. He notes the great accuracy of the measurements of residual stresses by the method in question in comparison with other methods.

[Abstracter's note: Complete translation.]

Card 1/1

MAKEYEV, I.M., kand.tekhn.nauk

Coordinating conference of branch industries on rolling and pipe  
mill machinery manufacture. Stal' 22 no.12:1104-1105 D '62.  
(MIRA 15:12)

(Rolling mills--Equipment and supplies)

MAKBYEV, I.M., kand.tekhn.nauk

Strength investigation and methods of designing steel-pouring ladles.  
Stal' 20 no.9:799-803 S '60. (MIRA 13:9)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut metalloobrabotki  
i mashinostroyeniya.  
(Open-hearth furnaces--Equipment and supplies)

15751-63  
ACCESSION NR: AR3002692

verified upon heating beams, together with strain gages up to 160°. Their sensitivity and linearity by loading them at the operating temperature (in the interval from 60 to 160°) was also verified. L.O. Magaziner

DATE ACQ: 14 Jun 63

SUB CODE: MI

ENCL: 00

Card 2/2



1 15751-63 EPR/EWP(13)/EPP(5)/EWP(X)/EWP(5)/EWT(m)/BDS AFWTC/ASD  
 Pa-L/Pc-L/P-L/Pf-L RM/VW/JD/HW  
 ACCESSION NO: AR3002692 8/0124/63/000/005/V076/V076

SOURCE: Rel. Mekhanika, Abs. 5V613

AUTHOR: Makayev, I.M.; Morozov, B.A.

TITLE: Strain gauge for measurement of static deformations under conditions of elevated temperatures

GUIDED SOURCE: Tr. Vses. n.-i. proyektno-konstrukts. in-ta metallurg. mashinostr., sp. 1, 1960, 258-263

TOPIC TAGS: strain gauge, static deformation, strain at elevated temperatures

TRANSLATION: Techniques are presented for the development of wire strain gages designed to operate at elevated temperatures (up to 150°). Methods of preparing the backing, the wire lattice and the drying curve of the strain gage are given. The maximal drying temperature is 180°. For preparing the backing, thin parchment and high quality BF-4 glue is recommended.

The results of tests on the gages are assembled. During tests under laboratory conditions, the reliability of the temperature compensation was

Card 1/2

MAKEYEV, Igor' Mikhaylovich; SAMOKHOTSKIY, A.I., inzh., ved. red.;  
GOPMAN, L.M., red.; SOROKINA, T.M., tekhn. red.

[Improved design of steel pouring ladles] Usovershenstvovanie  
konstruktsii stalerazlivochnykh kovshei. Moskva, Filial Vses.  
in-ta nauchn. i tekhn. informatsii, 1958. 27 p. (Peredovoi  
nauchno-tekhnicheskii i proizvodstvennyi opyt. Tema 1. No.M-58-  
263/5) (MIRA 16:3)  
(Open-hearth furnaces---Equipment and supplies)

MAKEYEV, I. M.: Master Tech Sci (diss) -- "Investigation of the strength of steel-casting ladles". Moscow, 1958. Published by the TsBNTI of Heavy Machinebuilding. 22 pp (Glavniiprojekt [Main Designing] of the Gosplan USSR, Central Sci Res Inst of Technology and Machinebuilding TsNIITMash), 160 copies (KL, No 1, 1959, 120)

1. 27434-66 EWT(m)/EWA(d)/T/EWP(t)/ETI/EWP(k) IJP(c) JP/HW

ACC NR: AP-017778

SOURCE CODE: UR/0133/65/000/009/0844/0844

AUTHOR: Grishkov, A. I.; Makeyev, I. F.; Dello, A. A.

ORG: Central Scientific Research Institute of Ferrous Metallurgy im. I. P. Bardin  
(Tsentral'nyy nauchno-issledovatel'skiy institut chernoy metallurgii)

TITLE: Development of technology for rolling heat-resisting steel and alloy sheet made of stainless and acid-resistant steels

SOURCE: Steel, no. 9, 1965, 844

TOPIC TAGS: metal rolling, heat resistant steel, stainless steel, sheet metal, steel, ductility, material deformation, solid mechanical property/KhN67VMTYu steel

ABSTRACT: KhN67VMTYu steel possesses satisfactory ductility in the 950-1180°C range and has increased strength properties (2-4 times more than steel 45) in the same temperature range. Below 1000°C, deformation resistance increases significantly. An appropriate rolling condition with not more than 7% reduction per pass is recommended. Developed and tested was the technique for producing large sheet measuring 8-15X1000X2500-3000 mm made from slabs measuring 120X500X1050 mm (used to equip the "Krasnyy Oktyabr" Plant) which were rolled into billets on the three-high Layta 2200 Rolling Mill with a single intermediate preheating to (120-70-25) mm and further on the 1700 Mill (to a 15-mm sheet with one intermediate heating, to a 8-10 mm sheet with two intermediate preheatings). The mechanical properties of the sheet in the supplied condition (after quenching from 1100-1130°C by a water spray) were as follows (minimum):  $\sigma_{TS} = 100$  (980) kg/mm<sup>2</sup> (Mn/m<sup>2</sup>);  $\sigma_s = 58$  (570) kg/mm<sup>2</sup> (Mn/m<sup>2</sup>);  $\delta = 18\%$ ,  $\psi = 20\%$ ,  $\alpha_K = 5$  (0.49) kg/cm<sup>2</sup> (mJ/m<sup>2</sup>). [JPRS]

SUB CODE: 1, 13, 20 / SUBM DATE: none

UDC: 621.771.23.001.5

NOVIKOV, V.; MATVEYEV, Yu.M.; RYZHINSKIY, M.B.; BATIST, A.I.; IGSESEL', G.;  
KOROLEV, M.; IVANTSOV, V.; ARONOV, I.; SVETLAKOV, V.; ZAYONCHIK,  
L.Z.; RASPOPOV, I.V.; SERDYUKOV, G.V.; GRISHKOV, A.I.; MAYEYEV, I.F.;  
DELLO, A.A.; SHUMNAYA, V.A., inzh.; SPIRYAGIN, L.P., inzh.; GRISHKOV,  
A.I.; KARDONOV, B.A.; BURDIN, V.M., kand. tekhn. nauk; MOLGACHEV,  
D.A., inzh.; MUZALEVSKIY, O.G.; RIVKIN, A.A.; KEYS, N.V.; KOMISSAROV,  
A.I.

New developments in research. Stal' 25 no.8:842-845 S '65.  
(MIRA 18:9)

MAKEYEV, I.F., kand. tekhn. nauk

Tension adjustment as a function of power during the rolling  
of steel strips on rolling mills with many rolls. Sbor. trud.  
TSNIICM no. 14:5-26 '58. (MIRA 12:5)  
(Rolling (Metalwork))

MAKEYEV, I. F.

MAKEYEV, I. F. -"Maintaining Constant Tension as a Function of the Electromagnetic Power of a Reeler Motor." Min Higher Education USSR. Moscow Order of Lenin Power Engineering Inst imeni V. M. Molotov. Moscow, 1955. (Dissertation for the Degree of Candidate in Technical Science).

SO Knizhanay letopis:  
No 2, 1956

MAKEYEV, G.V.

Improve the quality of plywood and matches. Der i lesokhim.prom.  
3 no.8:19-20 Ag '54. (MLRA 7:8)

1. Inspektsiya po kachestvu Minlesproma SSSR.  
(Plywood) (Match industry)



MAKEYEV, G.S., inzhener.

Hydraulic method of preventing cavitation corrosion in hydraulic  
turbines. Gidr.stroi. 23 no.8:30-32 '54. (MLRA 8:1)  
(Hydraulic turbines--Corrosion)

MAKUSEV, G. S.

✓ 2659. Makusev, G. S., and Shal'nev, K. K., Hydraulic protection of  
turbines from cavitation erosion (in Russian), *Izv. Akad. Nauk SSSR*  
*Old. Iss. Nauk* no. 11, 87-104, Nov. 1954.

*Part 1*  
This is a very interesting paper. It describes experiments performed  
on full-size turbines. Results of laboratory experiments obtained by K.  
K. Shal'nev, which show that intensity of cavitation depends on shape  
of profiles of peripheral edge of propeller turbine blades, were applied  
in practice.

*2*  
Rounded off inlet edge of blades' peripheral edge reduces cavitation,  
and consequently less erosion was observed on the throat ring.  
Although no data are given, workers claim that this simple and small  
change is very effective in preserving turbine blades.

V. B. Palijenko, Canada

MAKEYEV, G.N. (Orenburg)

Focal parabolic pairs of congruences. Izv. vys. ucheb. zav.; mat. no.2:  
70-83 '63. (MIRA 16:3)

(Congruences and residues)

MAKEYEV, G.N.

Focal T pairs and focal stratifiable pairs of congruences. Izv.  
vys. ucheb. zav.; mat. no.1:98-100 '63. (MIRA 16:5)

1. Orenburgskiy gosudarstvennyy pedagogicheskiy institut imeni  
V.P.Chkalova.  
(Congruences and residues) (Geometry, Differential)

BYKOV, P.B.; KHANKIN, L.D.; MAKHYEV, G.M., inzhener, retsenzents; GEL'MAN, V.G., inzhener, redaktor; POPOLOV, Ya.N., inzhener, redaktor izdatel'stva; TIKHONOV, A.Ya., tekhnicheskii redaktor

[Reducing setup, man and down time in lathe work] Sokrashchenie vspomogatel'nogo vremeni pri rabote na tokarnykh stankakh. Moskva, Gos. nauchno-tekhn. izd-vo mashinostroit. lit-ry, 1956. 166 p. (MIRA 9:12)  
(Turning)

MAKEYEV, G.I.

Mechanized gathering of material from under a belt  
conveyer. Gor. zhur. no.6:75 Je '62. (MIRA 15:11)

1. Nachal'nik Sheregeshskey drobil'no-obogatitel'noy  
fabriki.

(Sheregesh--Conveying machinery)

Automated ring furnaces control ...

S/118/61/000/001/001/005  
A161/A133

The RY-2 push button disconnects the automatic control circuit. The work at the output window is the same as at the input, however, the brush collector contacts trolley No.3 giving the command for the count relay, since the furnace hearth must turn after discharging two or three billets. The angle through which the hearth turns is determined by an electronic time relay (the turn can also be limited by a way switch). The remote control system has been provided for four ring furnaces. The control operators are eliminated. The annual economy amounts to 200 thousand roubles. There is 1 figure.

Card 5/8

Automated ring furnaces control ...

S/118/61/000/001/001/005  
A161/A133

fier output relays, P11-P14, pull in simultaneously thus disconnecting the KA coil circuit. The intermediate amplifier can transmit two commands at a time, producing opposite currents in the line. They will not be compensated because the current flows in different half-cycles. The PPB relay is connected to the communication trolley No.3 through the intermediate amplifier ПУ-3, and it pulls in when the circuit on the charging machine is closed through УП-3. The П3В (PZV) transistors are operating without overheat. The remote control can be operated in three different ways: manual operation from the charging machine, automatic and manual operation from the furnace operator's place. The remote control consists of a control panel on the charging machine with command keys and push buttons, and communication trolleys receiving commands (pulses) from the charging machine through a brush collector. There are three trolleys for each furnace, two of them for all commands at corresponding windows and the third (that is beside the communication trolley at the output window) for the counting of billets moving out. This trolley has a separate command amplifier. When the charging machine is at a window, automatic control is switched on by the КУ-1 push button, the rotation of the furnace hearth by the УП-2 key ("foreward" or "backward"), the window gate lifting by the УП-3 key (and lowering, by releasing the key).

Card 4/8



S/118/61/000/001/001/005  
A161/A133

Automated ring furnaces control ...

capacitor connected parallel to this resistor will be simultaneously charged. This voltage will oppose the opposite positive voltage. The potentials on the transistor bases in relation to the emitters will be: on the 1ПЗ (1P3) transistor  $\pm 0.8 - 3 \text{ v} = -2.2 \text{ v}$ ; on the 2ПЗ,  $+3 \text{ v} - 2.2 \text{ v} = +0.8 \text{ v}$ , where  $+0.8$  and  $+3 \text{ v}$  is the opposite voltage on the corresponding bases of the 1ПЗ and 2ПЗ transistors, produced by the winding (IV) of the intermediate amplifier transformer. Thus, the 1ПЗ transistor is open and P11 relay is pulled in, and the 2ПЗ transistor is closed and the P12 relay off. When the УП-2 (UP-2) switch is moved into position "backward", the voltage on the 220-ohm resistor will be 13 v. The transistors base voltage is now: on the 1ПЗ,  $+0.8 - 13 \text{ v} = -12.2 \text{ v}$ , and on the 2ПЗ,  $+3 \text{ v} - 12.2 \text{ v} = -9.2 \text{ v}$ . Both transistors will be open and the P11 and P12 relays pulled in. The second half of the amplifier receiving commands from УП-3 and КУ-1 (KY-1) works likewise, but the current in the communication trolley flows in the other direction, i.e., from the winding (III) of the transformer, and two other commands are transmitted by the trolley. When transmitting four commands, the output relays of the amplifier will operate in the following way: command I - the relay P11 is pulled in; II - P11 and P12; III - P13; IV - P13 and P14. The fifth command is produced by artificial grounding of the trolley (KY-2). All the ampli-

Card 3/8

S/118/61/000/001/001/005  
A161/A133

Automated ring furnaces control ...

contact channel was 40.9 Mc, which corresponds to a 7.33 m wavelength. The number of signals was four, transmitted with audio frequencies of 960, 1,100, 1,300 and 1,700 cycles. On repair days in the shop the reception was clear for a long time, but in work days the electric drives and machines caused interferences and false operations. Besides, the passing overhead cranes reduced the signals. The complexity of the system, the absence of alternating current on the charging machine and the lack of noiseproof feature made it expedient to choose the contact channel. Since five individual trolleys for each command were not possible, all five necessary commands had to be transmitted by one channel. The problem was solved by the polar-amplitude principle, which was achieved by semiconductor diodes and resistors producing two amplitudes of one polarity and two of the other. The fifth command is obtained by grounding the communication trolleys. It was possible to place them parallel to the rails head on the charging machine platform. A trolley voltage of 12 v was chosen for safety, and transistor amplifiers used after the trolleys. An intermediate amplifier works as follows (see diagram). If the switch (УП-2) on the charging machine is set on "foreward", a 3-volt current will flow into the transformer winding (II) and 220-ohm resistor. The

Card 2/8

S/118/61/000/001/001/005  
A161/A133

AUTHORS: Makeyev, G.F., Engineer; Vasyushkin, V.V., Technician

TITLE: Automated ring furnaces control in wheel rolling shop

PERIODICAL: Mekhanizatsiya i avtomatizatsiya proizvodstva, no. 1, 1961,  
19-21

TEXT: The ring furnaces for the heating of billets prior to rolling and of wheels prior to hardening at the Nizhne-Tagil'skiy metallurgicheskiy kombinat im. V.I. Lenina (Nizhniy Tagil Metallurgical Combine im. V.I. Lenin) have a rotary hearth and two windows with gates. The charging machines on the hearth level are working on direct current. The control was effected from separate control stations for each furnace. The Central Automation Laboratory of the Combine together with wheel shop technicians tested two different remote control communication channels between the loading machine and the furnace controls: a non-contact ultra-short wave channel, and a contact channel with an auxiliary trolley. The carrier frequency of the non-

Card 1/8

MAKEYEV, G.A.

Data on the use of immunological reactions in studying rheumatic psychoses. Zhur.nerv.i psikh. 62 no.6:903-909 '62.

(MIRA 15:11)

1. Kafedra psikhiiatrii (zav. - prof. K.A.Bangengeym) Sverdlovskogo meditsinskogo instituta.

(PSYCHOSES)

(RHEUMATIC FEVER)

(IMMUNOLOGY)

MAKEYEV, G. A.

MAKEYEV, G. A. -- "Materials on Psychoses Connected with Pyogenic Infections." Sverdlovsk State Med Institute, Sverdlovsk, 1956.  
(Dissertation for the Degree of Candidate of Medical Sciences)

SO: Knizhnaya Letopis' No 43, October 1956, Moscow

SLEPUSHKIN, Ye.I.; BURDIN, V.M.; KRAYUSHKIN, S.V.; MOLGACHEV, D.A.;  
Prinimali uchastiye: MAKEYEV, I.F., SHCHITOVA, V.M.

Experimental investigation of magnetoelastic dynamometers used  
in measuring metal pressure on rolling-mill rolls. Sbor. trud.  
TSNIICHM no.30:129-135 '63. (MIRA 16:10)

(Dynamometer)

AFANAS'YEV, Vasilii Danilovich; BORISOV, Yuriy Matveyevich; GUREVICH, Azriyel' Yefimovich; LEVITANSKIY, Boris Aronovich; MAKEYEV, Ivan Fodorovich; STEFANOVICH, Nikolay Nikolayevich; KHALIZEV, Georgiy Petrovich, kand. tekhn. nauk; SINITSYN, O.A., kand. tekhn. nauk, retsenzent; NEMIROVSKIY, M.I., prepodavatel', retsenzent; YAKOVENKO, N.N., red. izd-va; ISLENT'YEVA, P.G., tekhn. red.

[Electrical equipment of ferrous metallurgy enterprises] Elektro-oborudovanie predpriyatii chernoi metallurgii. [By] V.D.Afanas'yev i dr. Moskva, Metallurgizdat, 1963. 606 p. (MIRA 16:9)

1. Dnepropetrovskiy metallurgicheskiy tekhnikum (for Nemirovskiy). (Iron and steel plants--Electric equipment)

MAKEYEV, G.N. (Orenburg)

Adjunction of a focal pair T and  $\Theta$  to a given initial. Izv.  
vys. ucheb. zav.; mat. no.5:63-70 '63. (MIRA 16:11)



MAKEYEV, G.N. (Orenburg)

Focal pairs O. Izv. vys. ucheb. zav.; mat no.4:92-98 '63.  
(MIRA 16:10)

MAKEYEV, G.

Great power. Okhr. i truda i sots. strakh. 6 no.10:11-12  
0 '63. (MIRA 16:11)

1. Predsedatel' Rostovskogo promyshlennogo soveta professional'-  
nykh soyuzov.

MAKEYEV, F.T.

AID P - 3519

Subject : USSR/Power Eng  
Card 1/1 Pub. 26 - 13/30  
Authors : Agafonov, M. S., F. T. Makeyev, and M. S. Filippov, Engs.  
Title : 25 years of operation of the Chelyabinsk State Regional  
Power Plant of the Order of Lenin  
Periodical : Elek. sta., 9, 42-43, S 1955  
Abstract : The article describes the 25 years of operation of this  
power plant, without mentioning any engineering details.  
Names of workers and repairmen are given.  
Institution : None  
Submitted : No date

SLEPUSHKIN, Ye.I.; SHCHITOVA, V.M.; MAKEYEV, I.F.

Line diagrams of magnetoelastic pressure transducers, Izv.  
tekhn. no.9:16-20 S '63. (MIRA 17:1)

BALYCHEV, O.N.; ZHILKO, E.I.; MAKEYEV, I.P.; SHIBAYEV, I.P.

Command and executive device for automatic control of a charge distributor depending on the gas temperature along the charge hole circumference of a blast furnace. Sbor. trud TSNIIICHM (MIRA 16:10)  
no.30:23-27 '63.

(Blast furnaces--Equipment and supplies)  
(Automatic control)

ZAYTSEV, M.L.; MAKEYEV, I.F.; IGNATOVA, R.G.; NIKOZOV, A.I.; PATSEKIN, P.P.

Effect of rolling conditions on the 250-2 MMK finishing mills on  
quality of rolled rods. [Sbor. trud.] TSNIICHM no.29:155-170  
'63. (MIRA 17:4)

MAKEYEV, Fedor Ivanov ch, inzh.; BOBYLEVA, L.V., red.

[Tables of multiplication, division, and percentage calculation] Tablitsy umnozheniia, deleniia i protsentirovaniia. Moskva, Ekonomika, 1964. 305 p. (MIRA 17:6)

MAKEYEV, Fedor Ivanovich, inzh.-geodezist; KIMMEL', L.S., red.izd-va;  
GRECHISHCHEVA, V.I., tekhn. red.

[Stadia reduction tables] Takheometricheskie tablitsy. Moskva,  
Goslesbumizdat, 1963. 318 p. (MIRA 16:12)  
(Stadia tables)



YAROVENKO, V.L.; PYKHOVA, S.V.; USTINNIKOV, B.A.; LAZAREVA, A.N.; MAKEYEV, D.M.

Fermentative hydrolysis of starch in continuous alcohol fermentation.  
Perm.i spirt.prom. 31 no.1:5-10 '65. (MIRA 18:5)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut fermentnoy i  
spirtovoy promyshlennosti.

MAKEYEV, D. I., inzh.

Anisotropy of the mechanical properties of 08 steel depending  
on the direction of working and the temperature of recrystalli-  
zation. Sbor. Inst. stali i splav. no.40:200-209 '62.  
(MIRA 16:1)

(Steel—Cold working)  
(Metals, Effect of temperature on)

FAVLOV, I. M.; MAKEYEV, D. I., inzh.

Effect of the working direction on the recrystallization  
process of 08 steel. Sber. Inst. stal i splav. no.40:181-199  
'62. (MIRA 16:1)

1. Chlen-korrespondent AN SSSR (for Pavlov).

(Steel—Cold working)  
(Crystallization)

The influence of deformation ...

33167  
S/148/61/000/011/007/018  
E111/E480

grains similar in the longitudinal and transverse planes. Increase in reduction from 51% to 84% gave a considerably finer grain after recrystallization. Annealing in a salt bath (temperature fluctuations  $\pm 5^{\circ}\text{C}$ ) was also carried out. A characteristic peculiarity of the structure is that directionality is more pronounced in the longitudinal plane. It appears that an increase in second and third order strains leads to earlier recrystallization with more centres of crystallization and finally to a finer grain. There are 5 figures and 4 Soviet-bloc references.

ASSOCIATION: Moskovskiy institut stali (Moscow Steel Institute)

SUBMITTED: August 30, 1960

Card 3/3

The influence of deformation ...

S/148/61/000/011/007/018  
E111/E480

became dependent when deformation was raised to 21%. With 52% reduction, Vickers hardness rose to 163-174, the lower value corresponding to a deformation-ratio value of unity, the higher to one of 1.94 and measured transversely to the rolling axis (170 along). With 84% deformation, there was little further increase in hardness for specimens rolled with  $\mu/\beta = 1$ , but on rolling in only one direction it rose to 201 transversely and 180 along the rolling axis. As expected from these effects, microstructure observations showed that recrystallization of steel rolled in one direction began earlier and proceeded faster at 600°C than that of steel rolled with  $\mu/\beta = 1$ . Heating to 700°C made the structure more uniform and grains more equiaxial. With  $\mu/\beta = 2$ , grains were finer than with the ratio equal to 1, this relation holding even on complete annealing at 950°C, although recrystallization produced mainly equiaxial grains, size differences persisted. Increase in reductions to 84% led to a more elongated structure and a greater effect of deformation ratio: e.g. with  $\mu/\beta = 6$ , a grain in the end plane was only reduced (compressed) while along the strip length it was both reduced and longitudinally extended. Recrystallization at 600°C resulted in

Card 2/3

187500

1418

33167

S/148/61/000/011/007/018  
E111/E480

AUTHORS: Pavlov, I.M., Makeyev, D.I.

TITLE: The influence of deformation conditions on the recrystallization process of type 08 steel

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy. Chernaya metallurgiya, no. 11, 1961, 110-115

TEXT: One of the authors, I.M. Pavlov, has previously shown the usefulness of studying the effect of the relation of longitudinal and transverse deformation on the structure and properties of alloys. The other has described the structure and properties of 08 steel in the initial state (Ref. 4: Izv. VUZ. Chernaya metallurgiya, no. 2, 1960). This steel, initially in the form of a 50 x 50 mm square billet, was used for the present work. Before rolling, the steel was normalized at 950°C ( $A_{c3} = 930^{\circ}\text{C}$ ,  $A_{r3} = 900^{\circ}\text{C}$ ). 15.5 x 50 x 55 mm plates cut from the billet were cold-rolled with total reductions of 9 to 84%, reduction per pass being 1 to 1.5 mm. The ratio of longitudinal to transverse deformation coefficients  $\mu/\beta$  was 1 to 6.08. Reductions of 9 to 12% led Vickers hardness to rise from 80-90 to 126-128. Hardness remained independent of changes in the  $\mu/\beta$  ratio, but

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MAKEYEV, D.I.

Effect of repeated heatings on the microstructure and mechanical properties of 08 steel. Izv. vys. ucheb. zav.; chern. met. no.2:157-162 '60. (MIRA 15:5)

1. Moskovskiy institut stali.  
(Steel alloys--Heat treatment)  
(Metallography)

137-58-6- 12177

Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 6, p 144 (USSR)

AUTHORS: Polukhin, P.I., Makeyev, D.I., Fedosov, N.M.

TITLE: Methods of Grooving for a Novel Type of Rail-support Plate  
(Kalibrovka rel'svoy podkladki novogo tipa)

PERIODICAL: Sb. Mosk. in-t stali, 1957, Vol 36, pp 394-413

ABSTRACT: Two methods for grooving (G) of rolls employed in rolling a novel profile of rail support plates intended for heavy rails (67-75 kg/m) were developed and tested. The G methods gave favorable results when tested under conditions closely approaching actual operating conditions. It is established that rolling of the new rail support plates can be accomplished on rolling mills with rolls ranging from 500 mm to 650 mm in diameter. Of the two methods for G, the method in which the upper flanges are bent back offers greater advantages, because it permits to achieve shapes of smaller cross section in fewer passes. The employment of the first or second method of G, however, depends upon the specific conditions of rolling. The results of the investigations performed may be utilized in adapting technological procedures for rolling of the new profile of rail support plates. 1. Rolling mills--Design 2. Rolling mills--Test results 3. Metals S.G

Card 1/1  
--test results



RUB, M. G.; MAKEYEV, B. V.; VASIL'YEVA, G. L.

Criteria of the consanguinity of intrusive, subvolcanic and  
effusive rocks as revealed by a study in the Myao-Chanskiy region.  
Izv. AN SSSR. Ser. geol. 29 no. 1:21-41 Ja '64. (MIRA 17:5)

1. Institut geologii rudnykh mestorozhdeniy, petrografii,  
mineralologii i geokhimii AN SSSR, Moskva.

RUB, M.G.; NAKHAYEV, B.V.; SEREDAKHINOV, A.I.

Rare-earth minerals of acid lavas as one of the indicators of  
the metallogenetic specialization of igneous rock complexes.  
Izv. AN SSSR. Ser. geol.30 no.7:21-37 J1 '65. (MIRA 18:7)

1. Institut geologii rudnykh mestorozhdeniy, petrografii,  
mineralogii i geokhimii AN SSSR, Moskva.

SKORZHINSKIY, D.S., otv. red.; AFANAS'YEV, G.D., red.; MAKEYEV,  
B.V., red.; MORKOVKINA, V.F., red.

[Charnokites] Charnokity. Moskva, Izd-vo "Nauka," 1964.  
86 p. (Its Doklady sovetskikh geologov. Problema 13)  
(MIRA 17:6)

1. International Geological Congress, 22d. 1963.

RUB, M.G.; ONIKHIMOVSKIY, V.V.; BAKULIN, Yu.I.; GLAVATSKAYA, V.N.;  
KOSHMAN, P.N.; MAKEYEV, B.V.; RASTUNTSEV, A.P.; SELEZNEV, P.N.;  
TERENTENKO, N.A.; YANONIS, V.V.; KOPTEV-DVORNIKOV, V.S., otv.red.;  
ANDREYEV, Yu.K., red.izd-va; GOLUB', S.P., tekhn.red.

[Granitoids of the Myao-Chansk region and postmagmatic formations  
associated with them] Granitoidy Miao-Chanskogo raiona i sviazannye  
s nimi postmagmaticheskie obrazovaniya. Moskva, Izd-vo Akad.nauk  
SSSR, 1962. 168 p. (Akademiya nauk SSSR. Institut geologii  
rudnykh mestorozhdenii petrografii, mineralogii i geokhimii.  
Trudy, no.62). (MIRA 15:8)

(Kharbarovsk Territory--Granite)

RUB, M.G.; ONIKHIMOVSKIY, V.V.; MAKEYEV, B.V.

Petrogeochemical criteria of the relationship between mineralization and granitoids as exemplified by the Mya-Chanskiy region. Izv. AN SSSR. Ser.geol. 26 no.9:3-23 S '61. (MIRA 14:8)

1. Institut geologii rudnykh mestorozhdeniy, petrografi, mineralogii i geokhimii AN SSSR, Moskva.  
(Khabarovsk Territory--Petrology)

RUB, M.G.; MAKEYEV, B.V.

Manifestation of the metasomatic zoning near veins of the quartz-tourmaline composition as revealed by the Miao-Chang region.  
Geol.rud.mestorozh. no.6:59-67 N-D '61. (MIRA 14:12)

1. Institut geologii rudnykh mestorozhdeniy, petrografii, mineralologii i geokhimi AN SSSR.  
(Miao-Chang Region---Ore deposits)

MAKATS, G.M. (Khar'kov); MAKEYEV, B.A. (Khar'kov)

Optimizer for solving some problems in whole-number linear  
programming. Avtom. i telem. 25 no.2:262-268 F '64.  
(MIRA 17:4)

MAKATS, G.M.; MAKEYEV, B.A.; NOVOZHILOV, V.P.

Unit for solving the problem of optimum laying-out of a strip  
for rolling two type sizes. Avtom. i prib. no.4:33-36 O-D '63.  
(MIRA 16:12)



D'YACHENKO, S.K., dotsent; KIRCHACH, N.F., assistant; MAKEYEV, B.A., assistant

Determining ultimate torque of a starting safety coupling filled  
with small shots. Izv.vys.ucheb.zav.; mashinostr. no.8:64-71 '61.  
(MIRA 15:1)

1. Khar'kovskiy politekhnicheskii institut.  
(Torque--Measurement)

*MAKEYEV, B. A.*

124-58-9-10573D

Translation from: Referativnyy zhurnal, Mekhanika, 1958 Nr 9, p 160 (USSR)

AUTHOR: Makeyev, B. A.

TITLE: Dynamic Loads in Plastic Tooth Gears (Dinamicheskiye nagruzki v plastmassevykh zubchatykh kolezakh)

ABSTRACT: Bibliographic entry on the author's dissertation for the degree of Candidate of Technical Sciences, presented to the Khar'kovsk. politekhn. in-t (Khar'kov Polytechnic Institute) Khar'kov, 1958

ASSOCIATION: Khar'kovsk. politekhn. in-t (Khar'kov Polytechnic Institute), Khar'kov

1. Gears--Stresses 2. Stress analysis 3. Plastics--Applications

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MAKEYEV, B. A.

SAPOZHNIKOV, N.S.; MAKEYEV, B.A.; TYAGUNOV, V.A., kandidat tekhnicheskikh nauk, retsenzent; LUGINA, N.A., tekhnicheskii redaktor

[Improving the stuffing box of the lateral transmission of the S-80 tractor] Usovershenstvovanie sal'nika bortovoi peredachi traktora S-80. Moskva, Gos. nauchno-tekhn. izd-vo mashinostoit. i sudostroit. lit-ry, 1953. 19 p. (MLRA 7:8)  
(Tractors--Engines)